BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Improvements of BBMP Building at Sandeep unnikrishnan Main Road Thirumala Nagara in Attur Ward No. 04 Of Yelahanka Satellite town Sub division

								Estimate Cost	1500000
Sl No.	Description of work	Unit	Mesurement No.	L	B	D	Qty.	Rate	Amount
1	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Depth exceeding 1.5m, but not exceeding 3 m (PWD SR 2021-22 Vol -I Pg 5 item No. 1.4.2)								
	Footing for gate	Cum	2	0.9	0.9	1.5	2.43		
		Cum	2	0.9	0.9	1.5	2.43		
		Cum	2	0.9	0.9	1.5	2.43		
	Basic rate							**199.00**	
	Area weightage 10%							**19.9**	
	Total						**7.29**	**218.9**	**1595.78**
2	KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. Specification No. (PWD SR 2021-22 Vol -2 CORRIGENDA,item No. 6.4)								
	Footing	Cum	2.00	0.90	0.90	0.30	0.486		
		Cum	2.00	0.90	0.90	0.30	0.486		
		Cum	2.00	0.90	0.90	0.30	0.486		
	Basic rate							**2561.00**	
	Area weightage 10%							**256.10**	
	Total						**1.46**	**2817.10**	**4107.33**
3	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates.Specification (PWD SR 2021-22 Vol -I Pg 15 item no 2.1.3)								
	Footing	Cum	2	0.9	0.9	0.15	0.243		
		Cum	2	0.9	0.9	0.15	0.243		
		Cum	2	0.9	0.9	0.15	0.243		
	Cobble Stone								
		Cum	1	55.2	3.5	0.15	28.98		
		Cum	1	29.9	4.00	0.15	17.94		
	Basic rate							**5554.00**	
	Area weightage 10%							**555.4**	
	Total						**47.65**	**6109.40**	**291106.80**

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Sl No.	Description of work	Unit	Mesurement No.	L	B	D	Qty.	Rate	Amount
	Providing and laying in position Reinforced cement concrete for all **Sub structures of building,** Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/ trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) **M25** Design Mix Using 20 mm nominal size graded crushed coarse aggregates (Vol 2/ P No-17/ I no- 2.4.3 of PWD SR 2021-22)								
	For Footing								
	Footing	Cum	2.00	0.90	0.90	0.30	0.49		
		Cum	2.00	0.90	0.90	0.30	0.49		
		Cum	2.00	0.90	0.90	0.30	0.49		
	Column	Cum	2.00	0.20	0.20	1.05	0.08		
		Cum	2.00	0.20	0.20	1.05	0.08		
		Cum	2.00	0.20	0.20	1.05	0.08		
	Basic rate							**5992.00**	
	Add 8% For Shuttering							**479.36**	
	Sub Total							**6471.36**	
	Area weightage 10%							**647.14**	
	Total						**1.71**	**7118.50**	**12172.63**
5	Providing and laying in position Reinforced cement concrete for all **Super structures of building** , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/ trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) **M25 Design Mix** Using 20 mm nominal size graded crushed coarse aggregates (Vol 2/ P No-17/ I no- 2.5.2 of PWD SR 2021-22)								
	Column above Ground Level	Cum	2.00	0.20	0.20	2.10	0.17		
		Cum	2.00	0.20	0.20	2.10	0.17		
		Cum	2.00	0.20	0.20	2.10	0.17		
	Basic rate							**6186.00**	
	Add 10% For Shuttering							**618.60**	
	Sub Total							**6804.60**	
	Area weightage 10%							**680.46**	
	Total						**0.50**	**7485.06**	**3772.47**
6	Providing and laying heavy duty cobble stones 75mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per m2 over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and Usage charges of machinery complete as per specifications. (PWD SR 2021-22 Vol II Pg no 64 Item No 9.32)								
	Cobble Stone								
		Sqm	1	55.2	3.5		193.2		
		Sqm	1	29.90	4.00		119.6		
	Basic rate							**1145.00**	
	Area weightage 10%							**114.5**	
	Total						**312.80**	**1259.5**	**393971.60**

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Sl No.	Description of work	Unit	Mesurement No.	L	B	D	Qty.	Rate	Amount
	Providing Thermo-Mechanically Treated bars of grade Fe-500D or more Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position, binding and anchoring to adjacent members whereever necessary complete as per Design including cost of material, labour, usage charges complete as per specifications. (The laps and wastages shall not be measured separately). (PWD SR 2021-22 Vol -II Pg 84 item no 11.32)								
	Footing	Cum					1.46		
		Kg	Steel assumed 100 Kg/Cum of Concrete				145.80		
	Column	Cum					0.76		
		Kg	Steel assumed 200 Kg/Cum of Concrete				151.20		
	Basic rate							**96.00**	
	Area weightage 10%							**9.60**	
	Total						**297.00**	**105.60**	**31363.20**
8	Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two coat applied @ 1.67 ltr/10 m² over and including priming coat of exterior primer applied @ 2.20 kg/10 m²) with paint of approved quality to give an even shade, after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.(PWD SR 2021-22 Vol -II Pg 46 item no 8.30)								
	Out side Painting								
	Ground Floor								
		sqm	2	39.2		3.12	244.608		
		sqm	2	3.5		3.12	21.84		
	Deducation								
	Rolling shutter	sqm	-6	2.18		2.10	-27.468		
	V	sqm	-6	0.45		0.45	-1.215		
	Basic rate							**136.00**	
	Area weightage 10%							**13.6**	
	Total						**237.77**	**149.60**	**35569.64**
9	Finishing with Epoxy paint (two coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete. On concrete work including preparing the surface after thorougly cleaning oil, grease, dirt and foreign matter, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.(PWD SR 2021-22 Vol -II Pg 48 item no 8.36.2)								
	Inside Painting								
	shop 1	sqm	2	3.05		3	18.3		
			2	3.05		3	18.3		
	shop 2	sqm	2	3.05		3	18.3		
			2	3.05		3	18.3		
	shop 3	sqm	2	3.05		3	18.3		
			2	3.05		3	18.3		
	shop 4	sqm	2	3.05		3	18.3		
			2	3.05		3	18.3		
	shop 5	sqm	2	3.05		3	18.3		

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Sl No.	Description of work	Unit	Mesurement No.	L	B	D	Qty.	Rate	Amount
			2	3.05		3	18.3		
	shop 6	sqm	2	3.05		3	18.3		
			2	3.05		3	18.3		
	shop 7	sqm	2	3.05		3	18.3		
			2	3.05		3	18.3		
	shop 8	sqm	2	3.05		3	18.3		
			2	3.05		3	18.3		
	shop 9	sqm	2	3.05		3	18.3		
			2	3.05		3	18.3		
	shop 10	sqm	2	3.05		3	18.3		
			2	3.05		3	18.3		
	shop 11	sqm	2	3.05		3	18.3		
			2	3.05		3	18.3		
	shop 12	sqm	2	3.05		3	18.3		
			2	3.05		3	18.3		
	Deducation								
	Rolling shutter	sqm	-12	2.18		2.10	-54.936		
	V	sqm	-12	0.45		0.45	-2.43		
	Basic rate							**138.00**	
	Area weightage 10%							**13.8**	
	Total						**381.83**	**151.80**	**57962.40**
10	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. ((PWD SR 2021-22 Vol- 1 P.No -7 / I.No -1.9)								
	Filling Available of Excavated Earth								
	Earth Work Excavation	Cum		From Item No.01			7.29		
	PCC	Cum		From Item No.03			-0.73		
	Filling in foundation with granite / trap broken metal	Cum		From Item No.02			-1.46		
	Footing Concrete Quantity	Cum		From Item No.04			-1.71		
	Basic rate							204.00	
	Area weightage 10%							20.40	
	Total						**3.39**	**224.40**	**761.39**
11	Loading and Unloading of Stone Boulder/Stone aggregates/ Sand/Kankar/Moorum. (Tipper 5.5 m3) (PWD SR 2021-22 Vol-III Page No.3, Item No.1.1A)								
	Excavated Earth	Cum					7.29		
	Filling Available of Excavated Earth						-3.39		

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Sl No.	Description of work	Unit	Mesurement No.	L	B	D	Qty.	Rate	Amount
	Basic rate							**118.00**	
	Area weightage 10%							**11.80**	
	Total						**3.90**	**129.80**	**505.83**
12	Cost of Haulage Excluding Loading and Unloading Taking output 10 t load and lead 10 km = 100 t.km (PWD SR 2021-22 Vol-III Page No.3, Item No.1.4A)								
		t.Km		3.90		1.280	4.99		
	Basic rate							**12.00**	
	8Km 12*8							**96.00**	
	Area weightage 10%							**9.60**	
	Total						**4.99**	**105.60**	**526.75**
13	**Fabricating, providing and erecting in position Hot dip galvanised Gate.** Using 72 X 72 X 4.8mm Sq. GI Pipe Frame with Top pipe bending in heavy duty hydraulic press with sand packing and hot bending to form double arch as per drawing profile, 20mm hot dip galvanised sq. rod for verticals at 150mm c/c, as shown in the drawing including providing hot dip galvanised forged ornamental design in between sq. rods and heads at top, middle and bottom. Intermediate supports of 75X12 mm and 50X6 mm arch bend to hot dip galvanised flats. The work is inclusive of throughing GI flat GI sq. rods, placing, welding all the joints including grinding, finishing metal putty, painting two coats enamel painting. The rate is inclusive of all materials like GI sq. pipe, GI sq. rods, GI forged designs etc., heavy duty hinges are made out of 75mm solid sq. block assembled with 20mm dia bearing in three places for each flop. Heavy Duty Locking arrangements at tow places including cost of labour, painting, erecting charges using hoist pulley cranes with all lead and lift, loading, transportation, unloading, scaffolding charges and all other incidental charges for successful completion of the work as per directions of the Engineer-in-charge of the work. (Data Rate)								
	New Gates								
		Sqm	1	3.50		2.1	7.35		
		Sqm	1	5.30		2.1	11.13		
		Sqm	1	3.30		2.1	6.93		
	Basic rate							**12475.00**	
	Total						**25.41**	**12475**	**316989.75**
14	Repair of pull and push type rolling shutters of made of 18 guage, 75mm wide cold rolled steel laths of convex corrugation, with side guides and bottom rail, with interlocking arrangements for steel laths by means of alternate clips, suspension shaft with High tension coil type springs two numbers, mounted on specially designed pipe shaft, with bracket plates, guide channels, ball bearing arrangements, for inside & outside locking with push & pull operations the which ever parts unserviceable should be replace (Springs, wheels, Shaft & replace the leafs which corroded) new one with all necessary including cost of materials, labour, complete as per specifications ---- Including cost of all materials, with all lead,((PWD SR 2021-22 Vol- 2 P.No -184 / I.No -								
	Rolling Shutter								
		Sqm	4	2.18		2.10	18.31		
	Basic rate							**465.00**	
	Area weightage 10%							**46.50**	
	Total						**18.31**	**511.50**	**9366.59**

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Sl No.	Description of work	Unit	Mesurement No.	L	B	D	Qty.	Rate	Amount
15	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate sections and other sections of approved make conforming to IS: 733 and IS:1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron) including cost of materials, labour, usage charges of machinery complete as per specifications.(PWD SR 2021-22 Vol -II Pg 88 item no 11.35.2.3)								
		Kg	3	2.18		1.700	11.12		
	Basic rate							463.00	
	Area weightage 10%							46.3	
	Total	**12.0**					**133.42**	**509.3**	**67948.77**
16	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade l Type ll, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-incharge: Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side including cost of materials, labour, usage charges of machinery complete as per specifications.(PWD SR 2021-22 Vol -II Pg 88 item no 11.36.1)								
		Sqm	3	2.18		0.4	2.62		
	Basic rate							801.00	
	Area weightage 10%							80.10	
	Total						**2.62**	**881.10**	**2304.96**
17	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : 14.3.1 W.C. pan with ISI marked white solid plastic seat and lidBathroom Fittings. ((PWD SR 2021-22 Vol- 2 P.No -123 / I.No -14.3.1))								
	WC								
		Each	3				3.00		
	Basic rate							**5005.00**	
	Area weightage 10%							**500.5**	
	Total						**3.00**	**5505.5**	**16516.50**
18	Supplying steel Almirah with shelves & locker 6.6feet 18/20 gaugeof size 78" x 36"x 19" etc. including of all taxes as per approved by engineer in charge (Data rate) complete as per specifications.Specification .and directoin of site engineer in incharge(Data rate to approved)								
	Book Rakers								
		Nos	**3**				**3.00**		
	Basic rate							**7990.00**	
	Total						**3.00**	**7990.00**	**23970.00**

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Sl No.	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
								Grand Total	1270512.39
								GST Charges (18% of estimated cost)	228693.00
								Miscellenious and rounding	794.61
								Total Amount	1500000.00

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on S.R of 2021-2022, PWD Electrical SR 2021-22, Data Rates, Issused Rates and Corrigenda 1 & 2.

Assistant Engineer
BBMP

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ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ.
ಜ.ಬ.ಎ.ಪಾ. ಬೆಂಗಳೂರು-106

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP

Administrative Approval

Accorded For 15.00 Lakhs
Head of A/C P-3726
CER NO : 71 Dt: 27/8/22

EA

CE (YUK)

TECHNICALLY SANCTIONED FOR Rs. 15.00 Lakhs
Rupees Fifteen lakhs Only
Under P-3726
Zonal Public Works
Registered as CE ( ) No. 99
Subject to conditions contained in enclosed memo EE ( ) No. 44/91
Dt. 23/8/2022 Estimate A/ Sanctioned
BBMP/EE/YNK-01/TS/44/22-23 No. 44
Dated 23/8/2022 Rs. 15.00 Lakhs

Executive Engineer

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